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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,908	02/21/2002	Laszlo Hars	US 020049	3943

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
PARTHASARATHY, PRAMILA	
ART UNIT	**PAPER NUMBER**
2136	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/081,908	HARS, LASZLO	
	Examiner	Art Unit	
	Pramila Parthasarathy	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

2. Applicant's submission filed on December 11, 2006 has been entered and made of record.

Response to Arguments

3. Applicant's arguments filed 12/11/2006 with respect to pending amended claims have been fully considered and are not persuasive. As a means to providing further clarifications as to 35 USC 101 and Double patenting rejections, Examiner has provided additional reasoning and explanations for both rejections, while maintaining the same grounds of the rejection of the claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Amended Claims 1 – 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 – 22 are directed to an abstract idea, or in the present case a mathematical algorithm. *Diehr*, 450 U.S. at 185,209 USPQ at 7; accord, e.g., *Chakrabarty*, 447 U.S. at 309, 206 USPQ at 197; *Parker v. Flook*, 437 U.S. 584, 589, 198 USPQ 193, 197 (1978); Benson, 409 U.S. at 67-68, 175 USPQ at 675; *Funk*, 333 U.S. at 130, 76 USPQ at 281. The Office's current position is that claims abstract ideas do not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. § 101, and such claims are therefore ineligible for patent protection.

The independent amended claims 1, 9 and 15 do not "transform" an article or physical object to a different state or thing. The final result achieved by the independent amended claim is a determination without producing a useful, concrete and tangible result. Therefore the claims are non-statutory.

It is noted that Claims 4 and 11 recite "providing a notification that the random generator is not properly providing random numbers when the output of the exponential averaging operation falls outside the predetermined acceptable range" and Claim 16 recites "means for transforming an alarm signal when the output of the exponential averaging operation falls outside the predetermined acceptance range". However, they

do not provide any solution what happens when the random generator properly provides random numbers. As the notification or alarm signal only occurs when the condition is met and no result is provided for when the condition is not met. Each final result of the claim must have a result for all the conditions to be statutory.

5. As per Claim 15 – 18, merely claimed as unit and means for where the means is implemented in software representing a computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See also MPEP § 2106(IV)(B)(1)(a).

6. Page 10, lines 15 – 19 of the Specification of the instant application describes that the present invention can be implemented as computer software, thereby rendering the "means for" language in Claim 16 as computer software. In re Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994), decided that the "broadest reasonable interpretation." that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.

See also MPEP § 2181 also. Therefore, giving the claims their broadest reasonable interpretation, while keeping the structure disclosed in the specification in my mind, one of ordinary skill in the art would construe claims 15 - 18 as representing a computer program per se.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Amended Claims 1 – 22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 21 of U.S. Patent No. 6,947,960. Although the conflicting claims are not identical, they are not patentably distinct from each other because amended claims 1 – 22 of the instant application is anticipated by patent claims 1 – 21 in that the Claims of the patent contains all the limitations of the instant application. Claims of the instant application therefore is not patentably distinct from the earlier patent claims and as such is unpatentable for obvious-type double patenting *(In re Goodman (CAFC) 29 USPQ2d 2010 (12/3/1993)*.

A partial correspondence between the instant amended claims and the patent (6,947,960) claims are as follows:

10/081908	6,947,960
An apparatus comprising: a random generator unit for generating sequences of binary bits;	An apparatus for evaluating the random numbers generated by a random number generator, comprising: **a random generator unit for generating** random **sequences** comprising **of binary bits;**

a detector unit, coupled to an output of the random generator unit, for detecting whether the generated random sequences are **unpredictable**; and,	**a detector unit, coupled to the output of** said random generator unit, **for detecting whether said generated random sequences are sufficiently random**
a switching unit, coupled to the output of the random generator unit and an output of the detector unit, for disabling the flow of the sequences when the generated random sequences are determined to be predictable, wherein the detector unit is configured to: determine an average number of bits that have a value of a predetermined logic value at a specific, predefined range of intervals using exponential averaging operation (A), and determine that the sequence is predictable if the output of the exponential averaging operation (A) falls outside a predetermined acceptance range.	**a switching unit, coupled to the outputs** said **random generator unit and said detector unit, for disabling the flow of said generated random sequences are determined to be insufficiently random**, wherein said **generated random bits are stored and shifted by a predetermined amount to obtain modified products of bit sequences between said stored random sequences and said shifted random sequences**, said modified products applied to exponential averaging operations (A) to determine an average autocorrection value and wherein, if the output of any of said exponential averaging operations (A) falls outside a predetermined acceptance range, determining that said generated random sequences are insufficiently random.
... transmitting an alarm signal when the output of the exponential averaging operation falls outside the predetermined acceptance range.	... **transmitting an alarm signal when** any of **the output of said exponential averaging operations** (A) **falls outside** said **predetermined acceptance range**.

8. Applicant's arguments, with respect to 35 USC 112 rejection have been fully considered but not persuasive. Specification page 8 lines 15 – 17 for the (Applicant's) definition of the term "exponential average". Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Examiner suggests applicant to amend the claims in a manner to distinct applicant's invention. "wherein the exponential average is the exponential average of the expected values of the individual bits: $½ + ½ a + ½a^2 + ... = n/2$".

Examiner also points out that A_{old} is not defined or calculated in the parent claims as described in page 10 of remarks. $A_{new} = a . A_{old} + b$ thus become a linear function count because n is defined as a very large number and the relationship of n parameter is not defined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 6, 8, 13, 14, 17, 18, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 6, 13, 17 and 21, the limitation "exponential averaging operation" is indefinite because its definition cited in the claim is not exponential average operation but rather the claim expression becomes a linear function count because n is defined as a very large number and the relationship of n parameter is not defined.

Claims 8, 14, 18 and 22 are also rejected for being dependent on the rejected base claims 6, 13, 17 and 21 respectively.

10. Claims 1 – 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "properly providing" and "not properly providing" in claims is a relative term which renders the claim indefinite. The term "properly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. To 5:00p.m.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-232-4195. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pramila Parthasarathy
March 18, 2007.

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

3/19/07